## REMARKS

The present amendment is made to more particularly claim the present application and in response to the Final Office Action dated November 20, 2002 in the parent case. Claims 1-7 and 9-27 are pending in the present Application. Applicant has amended claims 1, 7, 9, 10, 19, and 22. Applicant has also canceled claims 23-27 and added claims 28-37. Consequently, claims 1-7 and 9-22, and 28-37 remain pending in the present Application.

Applicant has amended claims 1, 7, and 10 to correct minor errors. Applicant has also amended claim 1, 9, 10, 19, and 22 to recite that the focus zone is shifted so that the at least one object is out of focus if at least one of the plurality of subjects is not out of focus and if the focus zone can be shifted so that the at least one object is out of focus; that the aperture size is set without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus; and that the aperture size is adjusted to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. Support for the amendment can be found in Figure 7 of the present application. Applicant has also added claims 28-37, which recite that the location of the focus zone is set based on the aperture size if the aperture size has been adjusted to shorten the focus zone if it is determined that the focus zone cannot be shifted so that the at least one object is out of focus and that the remaining settings are set without shifting the focus zone or changing the aperture size if the aperture size and focus zone have been set so that the at least one object is out of focus. Support for new claims 28-37 can be found in Figure 7 of the present application and the accompanying discussion.

Applicant has also provided a redlined version of Figure 6A to correct minor errors. As described in the accompanying text, Figure 6A plots focus versus the reciprocal of the distance from the camera. Specification, page 15, lines 11-20 Thus, the horizontal axis should commence

at zero (or the reciprocal of infinity rather than infinity) and the plot furthest from the vertical axis should correspond to the object closest to the camera, object 502. Accordingly, Applicant respectfully submits that no new matter is added by the corrections made to Figure 6A.

In the above-identified Office Action, the Examiner indicated that claims 1, 7 and 10 were were objected to. Applicant has amended claims 1, 7, and 10 in order to address the Examiner's objection. Accordingly, Applicant respectfully submits that the Examiner's objections have been overcome.

In the above-identified Office Action, the Examiner rejected claims 1-2, 4-8, 10-11 and 13-21 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,067,114 ("Omata") in view of U.S. Patent No. 4,826,301 ("Ikemori"). The Examiner also rejected claims 3 and 12 under 35 U.S.C. § 103 as being unpatentable over Omata in view of Ikemori in further view of U.S. Patent No. 5,825,016 ("Nagahata"). The Examiner also rejected claims 9 and 22 under 35 U.S.C. § 103 as being unpatentable over Omata in view of Ikemori and Nagahata. The Examiner also rejected claims 23 and 25-26 under 35 U.S.C. § 103 as being unpatentable over Omata in view of Ikemori in further view of U.S. Patent No. 4,825,235 ("Wakabayashi"). The Examiner also objected claims 24 and 27 under 35 U.S.C. § 103 as being unpatentable over Omata in view of Ikemori and Nagahata in further view of Wakabayashi.

In the above-identified Office Action, the Examiner rejected claims 1-2, 4-8, 10-11 and 13-21 under 35 U.S.C. § 103 as being unpatentable over Omata in view of Ikemori. In response to Applicant's arguments, the Examiner cited Ikemori, col. 11, lines 41-60 as teaching shifting the focus zone so that the object is out of focus if at least one of the objects is not out of focus.

Applicant respectfully traverses the Examiner's rejection. Independent claims 1, 10 and 19 recite a method, system and computer-readable medium for capturing an image. In the method, system, and computer-readable medium of claim 1, 10 and 19, it is determined whether the focus

zone can be shifted so that that the at least one object is out of focus. This determination is made if at least one of the objects that is in the image matches certain criteria and is, preferably, in the background, is sufficiently out of focus. If the focus zone can be so shifted, then the focus zone is shifted so that the object is out of focus. Thus, the image can be placed in soft focus by shifting the focus zone, where possible. Claims 1, 10 and 19 also recite that the aperture size is set without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus and that the aperture size is adjusted to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. Thus, if shifting the focus zone is sufficient to ensure that the object is out of focus, then the aperture is set in a manner to preserve the shift. Similarly, if shifting the focus zone alone is not sufficient to ensure that the object is out of focus, then the aperture is set to reduce the size of the focus zone. Consequently, the ability of the digital imaging device to provide a soft focus is improved.

Omata in view of Ikemori fail to teach or suggest determining whether the focus zone can be shifted so that at least one object is sufficiently out of focus. Omata and Ikemori also fail to teach or suggest so shifting the focus zone **if** it is determined that the focus zone can be shifted sot that at least one object is sufficiently out of focus. Omata and Ikemori also fail to teach or suggest recite setting the aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus. Furthermore, Omata in view of Ikemori fails to teach or suggest adjusting the aperture size to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus.

Applicant can find no mention in Omata of determining whether the focus zone can be

shifted enough so that one or more objects are sufficiently out of focus. Applicant can also find no mention in Omata of shifting the focus zone only if it is determine that the focus zone can be so shifted. Instead, as the Examiner has acknowledged, Omata fails to disclose shifting the focus zone so that the at least one object is out of focus. Omata describes classifying objects in the image based on the size and proximity of objects, detecting compositional changes, such as an object being moved from the center to the edge of the image, and providing a continuous focus to ensure that the object the operator intends as the subject remains in focus. Omata, col. 1, line 40-col. 2, line 2. Consequently, Omata is concerned with tracking an object that is in focus, so that the subject of the image brought into focus stays in focus. Omata separately does not teach or suggest determining whether the focus zone can be shifted enough so that one or more objects are sufficiently out of focus and shifting the focus zone only if such a determination is made. Applicant has also found no mention in Omata of setting the aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus and adjusting the aperture size to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus.

Ikemori fails to teach or suggest setting the aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus and adjusting the aperture size to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. Further, Ikemori also fails to teach or suggest determining whether the focus zone can be shifted enough so that certain object(s) are sufficiently out of focus and shifting the focus zone **if** it is determined that the focus zone can be so shifted.

Ikemori describes a system that provides a soft focus by introducing a spherical aberration into the image. Ikemori, col. 11, lines 34-40. Thus, Ikemori does not provide a soft focus by shifting the focus zone. Ikemori teaches that the spherical aberration is introduced by moving one of the lenses in the system of Ikemori. Ikemori, Abstract, lines 5-11. Ikemori teaches that because the introduction of spherical aberrations by moving the lens shifts the focus zone, the image is refocused by moving a lens component to compensate for this shift. Ikemori, col. 11, lines 41-60. In other words, Ikemori refocuses the image in order to compensate for a change in the focus zone introduced by the movement of a lens. Therefore, although Ikemori teaches that a focus zone shift is detected and compensated for, Ikemori does not determine whether the focus zone can be shifted enough so that object(s) are sufficiently out of focus. Ikemori need not perform this step because the way in which Ikemori provides a soft focus is to introduce spherical aberrations. Consequently, Ikemori also does not shift the focus zone only if it is determined whether the focus zone can be shifted enough so that certain objects are sufficiently out of focus.

Further, Applicant can find no mention in Ikemori of setting the aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus. Applicant has also found no mention of adjusting the aperture size to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. Consequently, Ikemori must fail to teach or suggest these features.

Neither Ikemori nor Omata describe setting the aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus. Ikemori and Omata also fail to describe adjusting the aperture size to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. As a result, any combination of Ikemori and

Omata would fail to teach or suggest these features. Consequently, the combination would fail to teach or suggest setting the aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus and adjusting the aperture size to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. Omata in view of Ikemori, therefore, fails to teach or suggest the method, system, and computer-readable medium recited in claims 1, 10 and 19.

Furthermore, the combination of Omata in view of Ikemori fails to teach or suggest determining whether a focus zone can be shifted so that certain object(s) are sufficiently out of focus. The combination of Omata and Ikemori also fail to teach or suggest shifting the focus zone if it is determined that such a shift is possible. Both Omata and Ikemori are devoid of reference to determining whether the focus zone can be shifted enough that certain object(s) are sufficiently out of focus and shifting the focus zone if it is determined that the focus zone can be shifted. Consequently, any combination of Omata and Ikemori are missing these features. Stated differently, if the teachings of Ikemori are added to those of Omata, the combination initially focus and track the image using the system of Omata. The combination would also provide a soft focus by introducing spherical aberrations. The combination would do so by moving the lens of Ikemori in the corresponding system. The combination might also compensate for the shift in the focus zone introduced by the lens movement by refocusing, as in the teachings of Ikemori. However, the combination would still not determine whether the focus zone can be shifted enough that certain object(s) are sufficiently out of focus.

The addition of Wakabayashi does not change this conclusion. Wakabayashi describes changing the aperture size to improve the soft tone effect and decrease the depth of field. Wakabayashi does describe changing the aperture size in order to improve the image quality when

the soft focus filter is inserted. Wakabayashi, co. 18, lines 35-49. However, Wakabayashi apparently always sets the apertures size to decrease the depth of field. Applicant can find no mention in Wakabayashi of setting the aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus. Stated differently, Wakabayashi does not mention adjusting the aperture size without shifting the focus zone if the desired soft focus can be achieved with a focus zone shift alone. In addition, Wakabayashi does not mention adjusting the aperture size to shorten the focus zone **if** it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. Consequently, Omata and Ikemori in view of Wakabayashi fail to teach or suggest the method and systems recited in claims 1, 10, and 19. Accordingly, Applicant respectfully submits that claims 1, 10, and 19 are allowable over the cited references.

Claims 2 and 4-8 depend upon independent claim 1. Claims 11 and 13-18 depend upon independent claim 10. Claim 20-21 depend upon independent claim 19. Consequently, the arguments herein apply with full force to claims 2, 4-8, 11, 13-18 and 20-21. Accordingly, Applicant respectfully submits that claims 2, 4-8, 11, 13-18 and 20-21 are allowable over the cited references.

The Examiner also rejection claims 3 and 12 under 35 U.S.C. § 103 as being unpatentable over Omata in view of Ikemori in further view of Nagahata.

Applicant respectfully traverses the Examiner's rejection. Claim 3 and 12 depend upon independent claims 1 and 10, respectively. Consequently, the arguments herein apply with full force to claim 3 and 12. In particular, Omata in view of Ikemori and Wakabayashi fail to teach or suggest adjusting the aperture size without shifting the focus zone if the desired soft focus can be achieved with a focus zone shift alone. In addition, Omata in view of Ikemori and Wakabayashi

does not mention adjusting the aperture size to shorten the focus zone **if** it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. Omata in view of Ikemori and Wakabayashi also fail to teach or suggest determining whether the focus zone can be shifted a sufficient amount to ensure that some objects are out of focus and shifting the focus zone.

Nagahata fails to remedy the defects of Omata in view of Ikemori. The cited portions of Nagahata do describe a foreground and a background, with objects in the foreground being closer. However, Applicant can find no mention in Nagahata of adjusting the aperture size without shifting the focus zone if the desired soft focus can be achieved with a focus zone shift alone. In addition, Nagahata does not mention adjusting the aperture size to shorten the focus zone **if** it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. Applicant can find no mention in Nagahata of determining whether the focus zone can be shifted a sufficient amount to ensure that some objects, such as those in the background, are out of focus. Applicant can also find no mention in Nagahata of shifting the focus zone if it is determined that the focus zone can be so shifted. Instead, Nagahata describes determining to which region an object in the image belongs. Consequently, if the teachings of Nagahata are added to those of Omata and Ikemori, the combination might characterize certain objects as being in the foreground and others as being in the background. However, the combination would still fail to adjust the aperture size without shifting the focus zone if the desired soft focus can be achieved with a focus zone shift alone. The combination would also fail to adjust the aperture size to shorten the focus zone **if** it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. Finally, the combination would not determine whether the focus zone can be shifted a sufficient amount to ensure that

some objects are out of focus and then shift the focus zone it is determined that the focus zone can b so shifted. Consequently, Omata in view of Ikemori in further view of Nagahata fail to teach or suggest the method and image capture device recited in claims 1 and 10.

The Examiner also rejected claims 9 and 22 under 35 U.S.C. § 103 as being unpatentable over Omata in view of Ikemori and Nagahata.

Applicant respectfully traverses the Examiner's rejection. Claims 9 and 22 recite a method and computer-readable medium, respectively, including a program having the steps of adjusting the aperture size without shifting the focus zone if the desired soft focus can be achieved with a focus zone shift alone and adjusting the aperture size to shorten the focus zone **if** it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. The computer-readable medium of claims 9 and 22 also fail to determine whether the focus zone can be shifted a sufficient amount to ensure that some objects are out of focus and shifting the focus zone if the focus zone can be shifted a sufficient amount. The arguments herein thus apply with full force to claims 9 and 22. Consequently, Omata in view of Ikemori in further view of Nagahata fails to teach or suggest the method and computer-readable medium recited in claim 9 and 22. Accordingly, Applicant respectfully submits that claims 9 and 22 are allowable over the cited references.

Claims 28-37 are allowable over the cited references. Claims 28-37 depend upon claims 1, 9, 10, 19, and 22. Consequently, the arguments herein with respect to Omata, Ikemori and Wakabayashi apply with full force to claim 23 and 25-26. In particular, Omata in view of Ikemori and Wakabayashi fail to teach or suggest adjusting the aperture size without shifting the focus zone if the desired soft focus can be achieved with a focus zone shift alone. In addition, Omata in view of Ikemori and Wakabayashi fail to teach or suggest adjusting the aperture size to shorten

the focus zone **if** it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus. The combination of references also fail to teach or suggest determining whether the focus zone can be shifted a sufficient amount to ensure that some object(s) are out of focus and shifting the focus zone if the focus zone can be shifted the sufficient amount.

Claims 28-37 are also separately allowable over the cited references. Claims 28, 30, 32, 34, and 36 recite setting the focus zone location based on the aperture size if the aperture size has been adjusted to shorten the focus zone if it is determined that the focus zone cannot be shifted so that the at least one object is out of focus. Claims 29, 31, 33, 35, and 37 recite setting remaining settings without shifting the focus zone or changing the aperture size if the aperture size and focus zone have been set so that the at least one object is out of focus. Applicant has found no mention in Omata, Ikemori, Wakabayashi and Nagahata of setting the focus zone location based on the aperture size if the aperture size has been adjusted to shorten the focus zone if it is determined that the focus zone cannot be shifted so that the at least one object is out of focus. Likewise, Applicant has found no mention in Omata, Ikemori, Wakabayashi, and Nagahata of setting remaining settings without shifting the focus zone or changing the aperture size if the aperture size and focus zone have been set so that the at least one object is out of focus. Consequently, any combination of Omata, Ikemori, Wakabayashi and Nagahata also fail to teach or suggest these features. Accordingly, Applicant respectfully submits that claims 28-37 are separately allowable over the cited references.

Accordingly, for the above-mentioned reasons, Applicant respectfully submits that the claims are allowable over the cited reference. Consequently, Applicant respectfully requests reconsideration and allowance of the claims as currently presented.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made"**.

Applicant's attorney believes that this application is in condition for allowance. Should any unresolved issue remain, the Examiner is invited to call Applicant's attorney at the telephone number indicated below.

Respectfully submitted,

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## VERSION WITH MARKINGS TO SHOW CHANGES MADE

**IN THE CLAIMS**

1. (Twice amended) A method for capturing an image using an image capture device, the image capable of including a plurality of objects, each of the plurality of objects being a corresponding distance from the imaging device, the image being associated with a focus zone, method comprising the steps of:

(a) determining if the image matches at least one criteria;

(b) determining whether at least one of the plurality of objects is out of focus if the image matches the at least one criteria;

(c) determining whether the focus zone can be shifted so that [that] the at least one object is out of focus if the at least one object is not out of focus; and

(d) shifting the focus zone so that the at least one object is out of focus if at least one of the plurality of subjects is not out of focus and if it is determined that the focus zone can be shifted so that the at least one object is out of focus;

(e) setting an aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus; and

(f) adjusting the aperture size to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus.

7. (Twice Amended) The method of claim 1 wherein the step of shifting the focus zone ([c]d) further includes the step of:

(d1) shifting the focus zone so that the at least one object is outside of the focus zone if

the focus zone can be shifted so that the at least one object is outside of the focus zone.

9. (Twice Amended) A method for allowing an image having a center to be captured by an imaging device, the image capable of including a plurality of objects, each of the plurality of objects being a corresponding distance from the imaging device, the method comprising the steps of:

(a) determining if the image matches a plurality of criteria, the step of determining if the image matches the plurality criteria further including the steps of:

(a1) determining the corresponding distance for each of the plurality of objects;

(a2) categorizing the plurality of objects as being located in a foreground or a background based on the corresponding distance, the image matching a first criteria of the plurality of criteria if a first object in foreground has a first corresponding distance and a second object in the background has a second corresponding distance;

(a3) separating the image into a plurality of zones;

(a4) analyzing the image in each of the plurality of zones to determine an amount of the image which each of the plurality of objects occupies, the image matching a second criteria of the plurality of criteria if the first object occupies a particular amount of the image;

(a5) analyzing the image in each of the plurality of zones to determine if the first object in the foreground is in proximity to the center of the image, the image matching a third criteria of the plurality of criteria if the first object is in proximity to the center of the image;

(b) determining whether the second object is out of focus if the image matches the at least one criteria;

(c) determining a focus zone;

(d) determining whether the focus zone can be shifted so that that the at least one object is out of focus if the at least one object is not out of focus; and

(e) shifting the focus zone so that the at least one object is out of focus if at least one of the plurality of subjects is not out of focus and if the focus zone can be shifted so that the at least one object is out of focus;

(f) setting an aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus; and

(g) adjusting the aperture size to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus.

10. (Twice amended) An image capture device for capturing an image capable of including a plurality of objects, each of the plurality of objects being a corresponding distance from the imaging device, the image being associated with a focus zone, the image capture device comprising:

means for determining if the image matches at least one criterion;

means for determining whether at least one of the plurality of objects is out of focus if the image matches the at least one criteria;

means for determining whether the focus zone can be shifted so that [that] the at least one object is out of focus if the at least one object is not out of focus; and

means for shifting the focus zone, the focus zone shifting means shifting the focus zone so that the at least one object is out of focus if at least one of the plurality of subjects is not out of focus if it is determined that the focus zone can be so shifted;

means for adjusting an aperture size, the aperture size adjusting means setting the

aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus and adjusting the aperture size to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus.

19. (Twice Amended) A computer-readable medium containing a program for capturing an image capable of including a plurality of objects, each of the plurality of objects being a corresponding distance from the imaging device, the image being associated with a focus zone, program including instructions for:

determining if the image matches at least one criterion;

determining whether at least one of the plurality of objects is out of focus if the image matches the at least one criterion;

determining whether the focus zone can be shifted so that that the at least one object is out of focus if the at least one object is not out of focus; [and]

shifting the focus zone so that the at least one object is out of focus if at least one of the plurality of subjects is not out of focus if it is determined that the focus zone can be shifted so that the at least one object is out of focus;

setting an aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus;

adjusting the aperture size to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus.

22. (Twice Amended) A computer-readable medium containing a program for capturing

an image having a center to be captured by an imaging device, the image capable of including a plurality of objects, each of the plurality of objects being a corresponding distance from the imaging device, the program containing instructions for:

determining if the image matches a plurality of criteria, the instructions for determining if the image matches the plurality criteria further including instruction for:

determining the corresponding distance for each of the plurality of objects;

categorizing the plurality of objects as being located in a foreground or a background based on the corresponding distance, the image matching a first criterion of the plurality of criteria if a first object in foreground has a first corresponding distance and a second object in the background has a second corresponding distance;

separating the image into a plurality of zones;

analyzing the image in each of the plurality of zones to determine an amount of the image which each of the plurality of objects occupies, the image matching a second criterion of the plurality of criteria if the first object occupies a particular amount of the image;

analyzing the image in each of the plurality of zones to determine if the first object in the foreground is in proximity to the center of the image, the image matching a third criterion of the plurality of criteria if the first object is in proximity to the center of the image;

determining whether the second object is out of focus if the image matches the at least one criterion;

determining a focus zone;

determining whether the focus zone can be shifted so that that the at least one object is out of focus if the at least one object is not out of focus; and

shifting the focus zone so that the at least one object is out of focus if at least one of the plurality of subjects is not out of focus and if the focus zone can be shifted so that the at least one object is

out of focus;

setting an aperture size without shifting the focus zone after the focus zone has been shifted if it is determined that the focus zone can be shifted so that the at least one object is out of focus;

adjusting the aperture size to shorten the focus zone if it is determined that shifting the focus zone alone is not sufficient for the at least one object to be out of focus.

Please cancel claims 23-27.

Please add claims:

28. The method of claim 1 further comprising the step of:

(g) setting the focus zone location based on the aperture size if the aperture size has been adjusted to shorten the focus zone if it is determined that the focus zone cannot be shifted so that the at least one object is out of focus.

29. The method of claim 28 further comprising the step of:

(h) setting remaining settings without shifting the focus zone or changing the aperture size if the aperture size and focus zone have been set in steps (d), (e), (f), or (g).

30. The method of claim 9 further comprising the step of:

(h) setting the focus zone location based on the aperture size if the aperture size has been adjusted to shorten the focus zone if it is determined that the focus zone cannot be shifted so that the at least one object is out of focus.

31. The method of claim 30 further comprising the step of:

(i) setting remaining settings without shifting the focus zone or changing the aperture size if the aperture size and focus zone have been set in steps (e), (f), (g), or (h).

32. The image capture device of claim 10 wherein the focus zone shifting means further set the focus zone location based on the aperture size if the aperture has been adjusted to shorten the focus zone if it is determined that the focus zone cannot be shifted so that the at least one object is out of focus.

33. The image capture device of claim 32 further comprising

means for setting remaining settings without shifting the focus zone or changing the aperture size if the aperture size and focus zone have been set so that the at least one object is out of focus.

34. The computer-readable medium of claim 19 wherein the program further includes instructions for:

setting the focus zone location based on the aperture size if the aperture size has been adjusted to shorten the focus zone if it is determined that the focus zone cannot be shifted so that the at least one object is out of focus.

35. The computer-readable medium of claim 34 wherein the program further includes instructions for:

setting remaining settings without shifting the focus zone or changing the aperture size if the aperture size and focus zone have been set so that the at least one object is out of focus.

36. The computer-readable medium of claim 22 wherein the program further includes instructions for:

setting the focus zone location based on the aperture size if the aperture size has been adjusted to shorten the focus zone if it is determined that the focus zone cannot be shifted so that the at least one object is out of focus.

37. The computer-readable medium of claim 36 wherein the program further includes instructions for:

setting remaining settings without shifting the focus zone or changing the aperture size if the aperture size and focus zone have been set so that the at least one object is out of focus

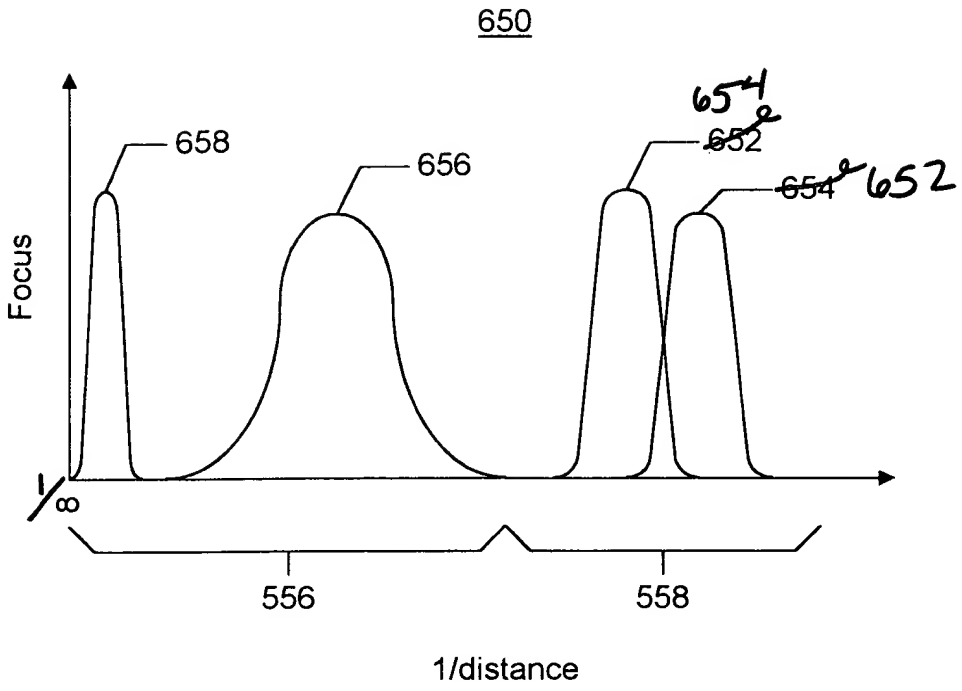


Figure 6A

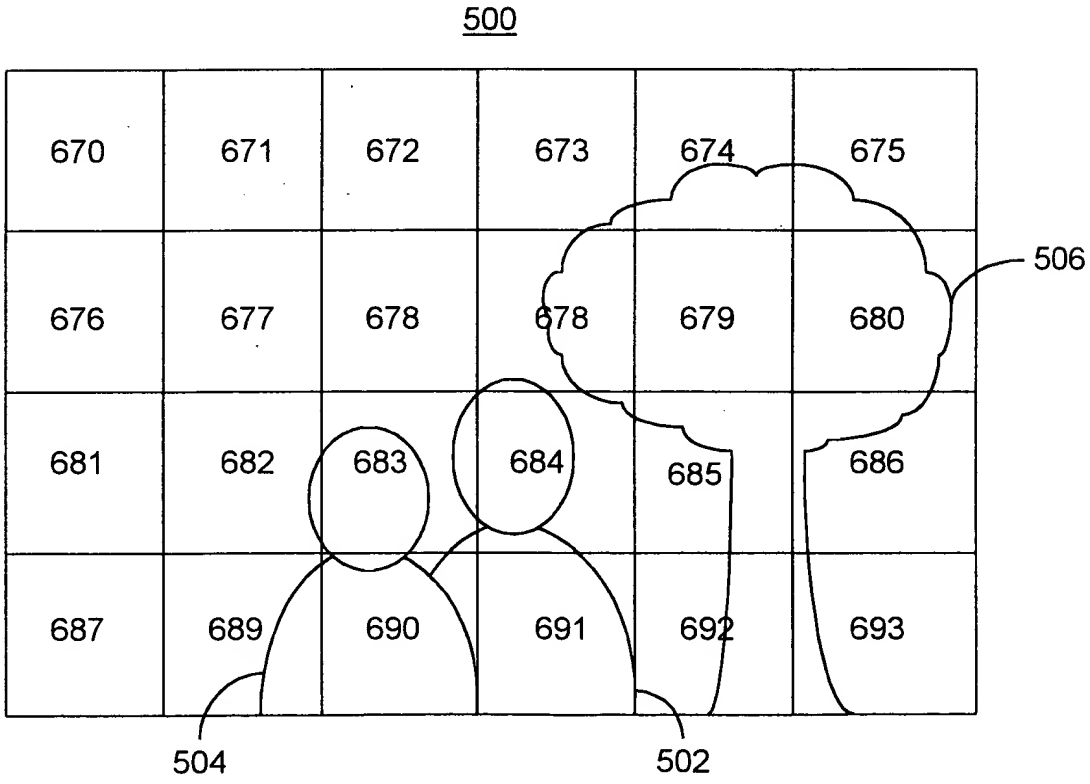


Figure 6B